

DETAILED ACTION

1. This communication is in response to the authorized examiner's amendments on. After a search and thorough examination of the present application and in light of the prior art made of record, claims 1-14 are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Randolph A. Smith on February 10, 2009.

Please replace the claims, which were filed on September 30, 2004 with new version as follows:

Claim 1 (Currently amended): An information processing device ~~[[to]]~~ in which a plurality of information recording media can be is simultaneously attached when said plurality of information recording media exist in which exists, wherein data stored in an information recording region is managed as a file by means of an individual file system, comprising:

a plurality of slots which are provided in ~~[[a]]~~ the body of said information processing device to attach the respective information recording media;

a system memory which retains file system control information for recognizing individual file systems constructed in said plurality of information recording media and unifying unifies and controlling controls the individual file systems into a single virtual file system, wherein said file system control information ~~[[including]]~~ includes:

(1) slot information including a priority order retained in said file system control information showing a priority for use of the plurality of information recording media and system information showing a file system in said information recording media, and

(2) open information showing information on opened files as well as flags for files having the same name;

a file system controller which refers to said slot information and said open information, and which sets said flags and accesses a file in a logical information recording region of said information recording media based on the priority order when files having the same name exist in said plurality of information media; and

an access controller which selectively accesses one of the plurality of slots and accesses an address in said information recording media designated by said file system controller, and acquires data of a file.

Claim 2 (Currently amended): The information processing device according to claim 1, wherein

said file system controller ~~[[once]]~~ initializes said slot_information and open information of file system control information in said system memory where a state is initially set for said application program in a manner that said information recording media are not attached and that all of the files are not open, when said information processing device is turned on.

Claim 3 (Previously presented): The information processing device according to claim 1, wherein

said file system controller sets the priority order of said slots in said slot information in advance for the respective slots when said information processing device is turned on.

Claim 4 (Currently amended): The information processing device according to claim 1, wherein

said file system controller creates slot information in reference to data recorded on a management information region of said information recording media and data in a part of a data region ~~[[and]]~~ , wherein said file system controller constructs a part of said file system control information when said information recording medium is attached to any of said plurality of slots.

Claim 5 (Original): The information processing device according to claim 1, wherein

when opening a specific file from said information recording medium, said file system controller refers to said slot information included in said file system control information, accesses all of the information recording media attached to the slots in an order based on said priority order included in said file system control information, confirms whether or not a file designated by an application exists, creates open information when a designated file is initially discovered, registers a flag that indicates whether or not a file having the same name exists with file information when the file having the same name exists in another information recording medium, and creates a file handle which is related to said open information.

Claim 6 (Original): The information processing device according to claim 1, wherein

when reading out data of a specific file from said information recording medium, said file system controller refers to said open information by using a file handle acquired at the time of file opening from said application, determines which slot information is to be utilized, and gives the obtained slot number to said access controller in order to read out file data required for said application from a specific information recording medium.

Claim 7 (Original): The information processing device according to claim 1, wherein

when recording file data on said information recording medium, said file system controller refers to said open information by using a file handle acquired at the time of

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file opening from said application, determines which slot information is to be utilized, and gives the obtained slot number to said access controller in order to record file data produced by said application on a specific information recording medium, and updates the slot information of the file system control information retained by said system memory.

Claim 8 (Original): The information processing device according to claim 1, wherein

when closing a specific file from said information recording medium, said file system controller refers to said open information by using a file handle acquired at the time of file opening from said application, determines a slot number that is being utilized, and gives the obtained slot number to said access controller in order to record management information in a management information region of said specific information recording medium, and initializes the open information of the file.

Claim 9 (Currently amended): A file management method for managing data stored in respective information recording regions within a plurality of information recording media by means of a file system controller and an access controller of an information processing device, wherein said method comprising comprises the steps of:

setting a utilization priority order for a plurality of slots to which said information recording media are attached[[,]] ;

creating slot information with system information in reference to data in a management information region recorded in [[one]] said information recording medium and data in a part of a data region when said information recording media are attached to any of said plurality of slots, [[and]] said file system controller producing a part of file system control information through said file system controller, ;

[[upon]] opening a specific file from an information recording medium, referring to said slot information included in said file system control information and said priority order included in said file system control information, accessing all of the information recording media attached to the slots, confirming whether or not a file that is designated by an application exists, creating open information when a designated file exists, registering a flag that indicates whether or not a file having the same name exists with said open information, and thereby, producing the rest of said file system control information, and thus constructing a unified file system where individual systems in said plurality of information recording media are unified through said file system controller [[,]] ;

[[upon]] reading out data of a specific file from said information recording medium, referring to open information of said file system control information by using a file handle acquired at the time of file opening from said application, determining which slot information is to be utilized, and giving the obtained slot number to said access controller, and thereby reading out file data required for said application from a specific information recording medium through said file system controller [[,]] ; and

[[upon]] recording file data on said information recording medium, referring to said file system control information by using a file handle acquired at the time of file opening from said application determining which slot information is to be utilized, and giving the obtained slot number to said access controller, and thereby recording file data produced by said application in a specific information recording medium, and updating slot information of said file system control information through said file system controller.

Claim 10 (Currently amended): The file management method according to claim 9, wherein

said plurality of information recording media are all managed by the same type of [[a]] file system.

Claim 11 (Original): The file management method according to claim 9, wherein said plurality of information recording media are managed by different types of file systems.

Claim 12 (Original): The file management method according to claim 9, wherein said file system controller uniquely specifies a file to be accessed on the basis of said priority order from among files having the same name that exist in said plurality of information recording media.

Claim 13 (Original): The file management method according to claim 9, wherein

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said file system controller confirms the existence of files having the same name in said plurality of information recording media, and gives the result to said application program.

Claim 14 (Original): The file management method according to claim 9, wherein said file system controller confirms the existence of files having the same name in said plurality of information recording media, and gives the result to said application program in response to a request from said application program at an arbitrary time point.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

The prior art made of record does not teach or fairly suggest the combination of elements recited in independent claims 1 & 9. More specifically, as recited in claim 1, the prior art of record does not specifically suggest "an information processing device in which a plurality of information recording media are simultaneously attached when said plurality of information recording media exists, wherein data stored in an information recording region is managed as a file by means of an individual file system, comprising: file system control information including: slot information including a priority order retained in said file system control information showing a priority for use of the plurality of information recording media and system information showing a file system in said information recording media, and open information showing information on opened files as well as flags for files having the same name; and a file system controller which refers to said slot information and said open information, and which sets said flags and accesses a file in a logical information recording region of said information recording media based on the priority order when files having the same name exist in said plurality of information media".

Further, with respect to claim 9, the prior art of record does not specifically suggest a file management method comprising the steps of: setting a utilization priority order for a plurality of slots; opening a specific file from recording medium, creating open information when a designated file exists, registering a flag that indicates whether or not a file having the same name exists with said open information, and thus constructing a

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unified file system where individual systems in plurality of information recording media are unified through said file system controller; referring to open information of file system control by using a file handle acquired at the time of file opening from said application, determining which slot information is to be utilized, and giving the obtained slot number to said access controller; recording file data on said information recording medium, and updating slot information of said file system control information through said file system controller.

Dependent claims 2-8 & 10-14, being definite, further limiting, and fully enabled by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA BULLOCK whose telephone number is (571)270-1395. The examiner can normally be reached on 7:30am-5pm EST M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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02/09/2009

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